CLAIMS

What is claimed is:

1. An apparatus comprising:

a first component;

a bus coupled to the first component, the bus to transmit packets of data; and

a second component coupled to the bus, messages passed between the first component and the second component through packets transmitted on the bus.

2. The apparatus of claim 1 wherein:

the packets of data may include either data cycles or special cycles, the special cycles encoding messages.

3. The apparatus of claim 2 wherein:

the second component may receive a message encoded in a special cycle from the first component and transfer that message to a third component, the third component coupled to the second component.

4. The apparatus of claim 3 wherein:

the third component acts upon the message.

5. The apparatus of claim 3 wherein:

the third component passes the message to a fourth component, the fourth component coupled to the third component.

6. The apparatus of claim 1 wherein:

the second component receives a message from the first component and acts upon the message.

7. The apparatus of claim 6 wherein:

the second component acts upon the message by asserting a signal.

8. The apparatus of claim 6 wherein:

the second component acts upon the message by changing behavior of the second component.

9. A method of virtualizing signals comprising:

receiving a signal in a first component;

passing a first message from the first component through a bus, the message encoding information relevant to the signal; and

receiving the first message in a second component through the bus.

10. The method of claim 9 wherein:

the signal is a second message, the signal received by the first component from a third component.

11. The method of claim 9 wherein:

the signal is a signal asserted by a third component.

12. The method of claim 9 further comprising:

passing the first message from the second component through a second bus to a third component.

13. The method of claim 9 further comprising:

acting on the first message, the acting performed by the second component in response to receiving the first message.

14. The method of claim 13 wherein:

the acting comprises asserting a signal.

15. The method of claim 13 wherein:

the acting comprises changing behavior.

16. A method of virtualizing signals in a system including a hub interface comprising:

receiving a first signal in a first hub;

passing a message from the first hub through a first hub interface, the message corresponding to the first signal; and

receiving the message through the first hub interface in a second hub.

17. The method of claim 16 further comprising:

acting on the message, the acting performed by the second hub responsive to the receiving the message.

18. The method of claim 17 wherein:

the acting comprises asserting a second signal.

19. The method of claim 17 wherein:

the acting comprises changing behavior.

20. The method of claim 16 further comprising:

determining if the message is intended for the second hub;

acting on the message if the determining indicates the message is intended for the second hub; and

passing the message through a second hub interface if the determining indicates the message is not intended for the second hub.

21. The method of claim 20 further comprising:

receiving the message in a third hub through the second hub interface.

22. A system using virtualized signals on a hub interface comprising:

means for receiving a first signal in a first hub;

means for passing a message from the first hub through a first hub interface, the message corresponding to the first signal, the first hub coupled to the first hub interface; and

means for receiving the message through the first hub interface in a second hub, the second hub coupled to the first hub interface.

23. The system of claim 22 further comprising:

means for acting on the message, the means for acting associated with the second hub and operating responsive to the means for receiving the message.

24. The system of claim 22 further comprising:

means for determining if the message is intended for the second hub;

means for acting on the message if the means for determining indicates the message is intended for the second hub;

means for passing the message through a second hub interface if the means for determining indicates the message is not intended for the second hub, the second hub interface coupled to the second hub; and

means for receiving the message in a third hub through the second hub interface, the third hub coupled to the second hub interface.

25. A chipset comprising:

a memory control hub capable of being coupled to a processor and capable of being coupled to a memory;

a bus coupled to the memory control hub, the bus implemented to transmit packets of data; and

an input-output hub coupled to the bus, the input-output hub capable of being coupled to an input-output device, the chipset capable of passing messages between the memory control hub and the input-output hub through packets transmitted on the bus, the messages including information about signals received from one or more of the processor, the memory, and the input-output device.

26. A system comprising:

a processor;

a processor bus coupled to the processor;

a memory;

a memory control hub coupled to the processor bus and coupled to the memory;

a bus coupled to the memory control hub, the bus implemented to transmit packets of data;

an input-output device; and

an input-output hub coupled to the bus, the input-output hub coupled to the input-output device, wherein messages may be passed between the memory control hub and the input-output hub through packets transmitted on the bus, the messages including information about signals received from one or more of the processor, the memory, and the input-output device.

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